

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-11 without prejudice or disclaimer of the subject matter recited therein; and

Please add the following new claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-11 (Canceled).

12. (New) An arrangement for moving a heavy load, the arrangement comprising:
at least one actuating unit;
the at least one actuating unit comprising a support for supporting the heavy load;
the support being immobile along a horizontal direction;
the first movable element being slidable relative to the support in a reciprocating manner such that the reciprocating movement of the first movable element causes the first movable element to move horizontally and vertically;
a second movable element supported by the first movable element and being adapted to slide relative to the first moveable element in reciprocating manner;
an arrangement for controlling sliding movements of the first and second movable elements,

wherein the sliding movements comprise:

a first phase in which the first movable element slides along a direction, moves in an upward direction, thereby raising the second movable element, which is substantially immobilized in the horizontal direction and wherein the second movable element lifts the heavy load from the support;

a second phase in which the first movable element is substantially immobilized and the second movable element, along with the heavy load supported thereby, slides along a direction of intended movement for the heavy load;

a third phase in which the first movable element slides in a downward direction, thereby lowering the second movable element, which is substantially immobile in the horizontal direction and lowers the heavy load onto the support; and

a fourth phase in which the first movable element is held substantially immobile and the second movable element slides along a direction opposite to a direction of movement of the load.

13. (New) The arrangement of claim 12, wherein the heavy load is adapted to move in the same horizontal direction as the first mobile element.

14. (New) The arrangement of claim 12, wherein the heavy load is adapted to move in the same horizontal direction as the first mobile element.

15. (New) The arrangement of claim 12, wherein, at the end of the fourth phase, the first and second movable elements are arranged in the same position as in a beginning of the first phase.

16. (New) The arrangement of claim 12, wherein, relative to the first phase, the first movable element slides in an opposite direction in the third phase.

17. (New) The arrangement of claim 12, wherein, relative to the second phase, the second movable element slides in an opposite direction in the fourth phase.

18. (New) The arrangement of claim 12, wherein the support comprises two walls for simultaneously supporting the heavy load, and a channel arranged between the two walls.

19. (New) The arrangement of claim 18, wherein each of the two walls comprises an upper edge.

20. (New) The arrangement of claim 18, wherein the support is elongated substantially in a direction of movement of the first movable element.

21. (New) The arrangement of claim 20, wherein the support houses the first and second movable elements.

22. (New) The arrangement of claim 12, wherein the first and second movable elements slide within a channel of the support.

23. (New) The arrangement of claim 12, wherein the at least one actuating unit is structured and arranged to assume a variable gradient relative to the horizontal direction.

24. The arrangement of claim 12, wherein the first movable element moves towards the second movable element in the first phase.

25. The arrangement of claim 12, wherein the second movable element moves towards the first movable element in the second phase.

26. The arrangement of claim 12, wherein the first movable element moves away from the second movable element in the third phase.

27. The arrangement of claim 12, wherein the second movable element moves away from the first movable element in the fourth phase.

28. (New) The arrangement of claim 12, wherein the support comprises two walls having upper edges for simultaneously supporting the heavy load, the two walls defining

between them an elongated channel, wherein the first and second movable elements slidable engage surfaces of the elongated channel.

29. (New) The arrangement of claim 12, wherein the at least one actuating unit further comprises at least two hydraulic jacks.

30. (New) The arrangement of claim 29, wherein the at least two hydraulic jacks are arranged horizontally to support the heavy load.

31. (New) The arrangement of claim 12, wherein the arrangement for controlling sliding movements of the first and second movable elements comprises first and second hydraulic jacks.

32. (New) The arrangement of claim 31, wherein the first hydraulic jack is structured and arranged to move the first movable element and wherein the second hydraulic jack is structured and arranged to move the second movable element

33. (New) The arrangement of claim 12, wherein the at least one actuating unit comprises at least two horizontally spaced apart actuating units.

34. (New) The arrangement of claim 33, wherein the arrangement for controlling sliding movements of the first and second movable elements is structured and arranged to

synchronise movements of the first and second movable elements of the at least two horizontally spaced apart actuating units.

35. (New) The arrangement of claim 12, wherein the heavy load and the first movable element are adapted to move along a direction which has the same horizontal component.

36. (New) The arrangement of claim 12, wherein the at least one actuating unit comprises at least two horizontally spaced apart actuating units located in the vicinity of one another.

37. (New) The arrangement of claim 36, wherein the arrangement for controlling sliding movements of the first and second movable elements is structured and arranged to synchronise movements of the first and second movable elements of the at least two horizontally spaced apart actuating units.

38. (New) The arrangement of claim 36, wherein the arrangement for controlling sliding movements of the first and second movable elements of each of the at least two horizontally spaced apart actuating units comprises first and second actuating devices.

39. (New) The arrangement of claim 36, further comprising a control device for synchronising movements of the first and second movable elements of each of the at least two horizontally spaced apart actuating units.

40. (New) The arrangement of claim 36, wherein the first movable elements of the at least two horizontally spaced apart actuating units are oriented in opposite directions and wherein the second movable elements of the at least two horizontally spaced apart actuating units are oriented in opposite directions.

41. (New) A method of moving a heavy load using the arrangement of claim 12, the method comprising:

arranging the at least one actuating unit beneath the heavy load; and
performing the first, the second, the third and the fourth phases consecutively,
whereby the heavy load is moved

42. (New) An arrangement for moving a heavy load, the arrangement comprising:
at least one actuating unit;
the at least one actuating unit comprising a support for supporting the heavy load;
a plurality of jacks coupled to the support;
a first movable element adapted to slide within a channel of the support;

the first movable element being movable in reciprocating manner such that the reciprocating movement of the first movable element causes the first movable element to move horizontally and vertically;

a second movable element adapted to slide within the channel of the support;

the second movable element slidably engaging the first movable element and being movable in reciprocating manner towards and away from the first movable element; and

an actuating system for controlling sliding movements of the first and second movable elements.

43. (New) The arrangement of claim 42, wherein the actuating system comprises first and second actuating devices.

44. (New) A method of lifting a heavy load using the arrangement of claim 42, the method comprising:

sliding the first movable element along a first direction, wherein the sliding causes the first and second movable elements move in an upward direction, and wherein the heavy load is lifted from the support with the second movable element;

during the sliding of the first movable element along the first direction, ensuring that the second movable element is substantially immobilized relative to the horizontal direction;

sliding the second movable element, along with the heavy load supported thereby, along a second direction such that the heavy load is caused to move upwards;

during the sliding of the second movable element along the second direction, ensuring that the first movable element is substantially immobilized relative to the horizontal direction;

sliding the first movable element along a third direction such that the first and second movable elements move in a downward direction;

during the sliding of the first movable element along the third direction, ensuring that the second movable element is substantially immobilized relative to the horizontal direction;

sliding the second movable element along a fourth direction such that the second movable element moves in a downward direction; and

during the sliding of the second movable element along the fourth direction, ensuring that the first movable element is substantially immobilized relative to the horizontal direction.

45. (New) The method of claim 44, wherein the first direction is opposite the second direction.

46. (New) The method of claim 44, wherein the third direction is opposite the fourth direction.

47. (New) The method of claim 44, wherein the first and third directions are the same.

48. (New) The method of claim 44, wherein the second and fourth directions are the same.

49. (New) An arrangement for moving a heavy load, the arrangement comprising:

- at least one actuating unit;
- the at least one actuating unit comprising a support for supporting the heavy load;
- a plurality of jacks arranged to lift the support;
- a first movable element adapted to slidably engage the support;
- the first movable element being movable in a reciprocating manner such that the reciprocating movement of the first movable element causes the first movable element to move horizontally and vertically;
- a first actuating device structured and arranged to move the first movable element in opposite directions;
- a second movable element adapted to slidably engage the support and the first movable element, the second movable element being movable in reciprocating manner towards and away from the first movable element; and
- a second actuating device structured and arranged to move the second movable element in opposite directions.

50. (New) A method of lifting a heavy load using the arrangement of claim 49, the method comprising:

sliding the first movable element along a first direction, wherein the sliding causes the first and second movable elements move in an upward direction, and wherein the heavy load is lifted from the support with the second movable element;

during the sliding of the first movable element along the first direction, ensuring that the second movable element is substantially immobilized relative to the horizontal direction;

sliding the second movable element, along with the heavy load supported thereby, along a second direction such that the heavy load is caused to move upwards;

during the sliding of the second movable element along the second direction, ensuring that the first movable element is substantially immobilized relative to the horizontal direction;

sliding the first movable element along a third direction such that the first and second movable elements move in a downward direction;

during the sliding of the first movable element along the third direction, ensuring that the second movable element is substantially immobilized relative to the horizontal direction;

sliding the second movable element along a fourth direction such that the second movable element moves in a downward direction; and

during the sliding of the second movable element along the fourth direction, ensuring that the first movable element is substantially immobilized relative to the horizontal direction.